

ABSTRACT

5 A spacer apparatus for insulating a beam bushing assembly of an
axle/suspension system from direct metal-to-metal contact with the vehicle frame
hanger on which the assembly is pivotally mounted. In one embodiment, an
integrally-formed one-piece apparatus includes a spacer disk portion and collar
portions, whereby the collars provide a complementary fit of the spacer apparatus
10 on the bushing assembly mounting tube, and generally prevents or minimizes
relative movement between the spacer disk and bushing assembly. In other
embodiments, one or more load dissipation structures mounted on or forming a
part of the beam and/or its bushing assembly prevent substantially non-planar
surfaces of the assembly from contacting a spacer disk by increasing the bearing
area of those surfaces which contact the disk. These apparatus generally
15 eliminate excessive wear or damage to the spacer disk and possible resulting
damage to the axle/suspension system.